

Fig. 1

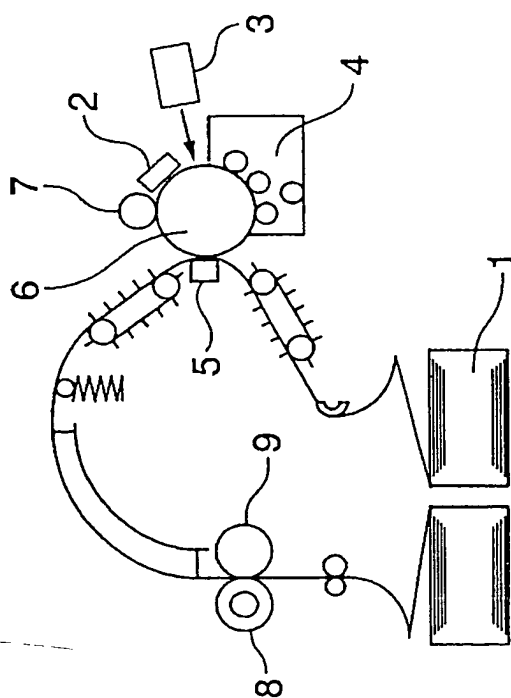


Fig. 2

	Toner				
	Coloring pigment	Wax			External additive
		Kind	Molecular weight expressed in polyethylene (Mn)	Maximum absorption peak (°C)	
Example 1	Titanium oxide (TiO)	Polypropylene wax BISCOL 660P	1070	141.2	SiO ₂
Example 2	Titanium oxide (TiO)	Polypropylene wax BISCOL 660P	1070	141.2	TiO ₂
Example 3	Titanium oxide (TiO)	NEOWAX AL	430	98.4	TiO ₂
Example 4	Titanium oxide (TiO)	Paraffin wax HNP-11 Polyethylene wax PW1000	390 820	70.6 (109.4)	TiO ₂ SiO ₂
Example 5	Titanium iron oxide (FeTiO ₃)	Fischer-Tropsch wax SPRAY30	520	91.9	TiO ₂
Example 6	Titanium iron oxide (FeTiO ₃)	Paraffin wax HNP-11 Polyethylene wax PW1000	390 820	70.6 (109.4)	TiO ₂ SiO ₂
Example 7	Triiron tetroxide (Fe ₃ O ₄)	Polypropylene wax BISCOL 660P	1070	141.2	TiO ₂ SiO ₂
Example 8	Triiron tetroxide (Fe ₃ O ₄)	Polyethylene wax PW1000	820	109.4	TiO ₂
Example 9	Triiron tetroxide (Fe ₃ O ₄)	Fischer-Tropsch wax SPRAY30	520	91.9	SiO ₂
Example 10	Triiron tetroxide (Fe ₃ O ₄)	Paraffin wax HNP-11 Fischer-Tropsch wax SPRAY30	390 520	70.6 (91.9)	TiO ₂ SiO ₂
Example 11	Titanium oxide (Ti ₂ O ₃)	NEOWAX AL	430	98.4	TiO ₂
Example 12	Titanium oxide (Ti ₄ O ₇)	NEOWAX AL	430	98.4	TiO ₂
Comparative Example	Carbon black	Polypropylene wax BISCOL 660P	1070	141.2	SiO ₂

Fig. 3

	Printing Change and Fixing Characteristic of Toner				
	Image density	Image density after 50000 pages' printing	Non-offset temperature range (°C)	Tape peel strength (%)	Rubbing strength (%)
Example 1	1.38	1.28	185~ >220	65	62
Example 2	1.43	1.43	185~ >220	63	59
Example 3	1.46	1.43	170~ >220	88	91
Example 4	1.43	1.42	165~ >220	92	89
Example 5	1.31	1.32	170~ >220	85	84
Example 6	1.33	1.32	165~ >220	87	89
Example 7	1.08	1.06	185~ >220	58	55
Example 8	1.26	1.26	170~ >220	77	81
Example 9	1.18	1.17	165~ >220	83	84
Example 10	1.36	1.33	165~ >220	87	87
Example 11	1.38	1.36	170~ >220	85	86
Example 12	1.20	1.18	170~ >220	81	89
Comparative Example	1.42	1.39	180~ >220	68	64